

Attachment E to ACL Order R5-2020-0553
Shasta County Service Area No. 17 Cottonwood (CSA 17)
Description of Compliance Project for Mandatory Minimum Penalties

1. **Project Title:** Cottonwood Wastewater Treatment Plant Improvement Project – Additive Alternative A, Installation of Redundant Traveling Bridge Sand Filter
2. **Service Area:** CSA 17
3. **Name of Responsible Entity:** Shasta County
4. **Estimated Cost for Project Completion:** Rehabilitation of the existing traveling bridge sand filter at the Cottonwood Wastewater Treatment Plant (WWTP) has a construction cost of \$572,853 per the lowest bidder in the public bid opening on August 15, 2019. This cost does not include design or construction management fees nor staff costs associated with engineering design support and project management. Hence the cost will far exceed the \$282,000 in Mandatory Minimum Penalties (MMPs).
5. **County Contact Information:** Troy Bartolomei, Deputy Director - Operations
Shasta County Department of Public Works
1855 Placer Street
Redding, CA 96001
530-245-6827
tbartolomei@co.shasta.ca.us
6. **Project Goals and Description:** The goal of this project is to have a redundant filter at CSA 17 for ease of operations and maintenance. A new filter is being constructed as part of the base bid part of the project; however, the existing filter is obsolete, and replacement parts cannot be obtained. One filter is operated at all times and therefore cannot be taken offline for maintenance, as such Shasta County desires to include Additive Alternative A to the project to retrofit the existing filter. A redundant filter will allow for a filter to be taken offline annually for deep cleaning and other preventative maintenance thus maximizing filter useful life.
7. **Water Quality and Beneficial Uses:** The CSA 17 WWTP discharges to Cottonwood Creek, a water of the United States and tributary to the Sacramento River. The Sacramento River Basin Plan defines the following beneficial uses for Cottonwood Creek as follows:

Existing:

- Municipal and domestic water supply (MUN)
- Agricultural irrigation and stock supply watering (AGR)
- Water contact recreation including canoeing and rafting (REC-1)
- Other non-contact water recreation (REC-2)
- Warm freshwater habitat (WARM)
- Cold freshwater habitat (COLD)

- Cold migration of aquatic organisms (MIGR)
- Spawning, reproduction, and/or early development, warm and cold (SPWN)
- Wildlife habitat (WILD)

Potential:

- Industrial process supply (PROC)
- Industrial service supply (IND)
- Hydropower generation (POW)

In recent years, a majority of the WWTP effluent limit violations can be attributed to the existing deficient filter, which has met its useful service life, including but not limited to total coliform, total chlorine residual, and disinfection byproducts. The existing carriage-mounted backwash hood has wheels that run along plates that are not evenly aligned, thereby resulting in uneven and inadequate backwashing and filter overflows. Filter overflows then affect the downstream chlorination process, thus resulting in additional effluent limit violations associated with too much or too little chlorine dosing. A redundant filter will allow for both filters to be taken offline on a regular basis for deep cleaning and other preventative maintenance, thus maximizing filter useful life while minimizing future overflows. This will result in improved water quality in Cottonwood Creek for all beneficial uses.

- 8. Confirmation that the Compliance Project Contains Only Measures that Go Above and Beyond Applicable Obligations of the Discharger:** Shasta County is under no prior obligation to install this redundant filter. This installation exceeds regulatory requirements and therefore qualifies as a Compliance Project.
- 9. Demonstration that the Compliance Project Does Not Directly Benefit, in a Fiscal Manner, a Water Board's Functions, Its Members, or Its Staff:** The project does not directly benefit, in a fiscal manner, the Water Board's functions, its members, or its staff. The project is not a conflict of interest for the Water Board.
- 10. Project Schedule, Milestones, and Deliverables:** The Notice to Proceed for the Project, including Additive Alternative A, was given to the contractor on October 14, 2019. Construction is currently underway on the new filter. The new filter must be functionally tested and put online before work on Additive Alternative A can begin. The contractor currently has this scheduled to begin by October 2020, although this may be adjusted as construction progresses. Final completion date of the project is 7 May 2021. All work, including the filter, will be completed by this date.

Shasta County is responsible for providing all deliverables described below:

Deliverables:

Progress Report: The County will submit a progress report including, at a minimum, updated construction photographs, a summary of budget expenditures to-date, and a summary of the status of the redundant traveling bridge filter improvements.

Due Date: Quarterly, until construction of the redundant filter is complete and accepted by Shasta County. Reports are due two weeks from the end of each quarter, i.e. Quarter 1 due April 14th, Quarter 2 due July 14th, Quarter 3 due October 14th, and Quarter 4 due January 14th of the following year.

Final Report: The final report will document that the Compliance Project has been completed, will include a summary of all completed tasks, and will have an accounting of all expenditures. The accounting will clearly show whether the final cost of the successfully completed compliance project was less than, equal to, or more than the liability suspended amount of \$282,000. The following statement will be included above the signature line of the report: *"I certify under penalty of perjury that the foregoing is true and correct."*

Due Date: Two months after the redundant filter is accepted by Shasta County, but no later than 7 July 2021.

- 11. Reports to the Water Board:** Shasta County shall submit all deliverables, reports, and accounting invoices pertaining to this project to the Central Valley Water Board, Redding Office.